SERVICE MANUAL & PARTS LIST (without price)

CSF-4450/4650/4950(ZX-855✻E/✻F)

(Version ✻E and ✻F)

OCT. 1995

CSF-4950

Caution: CSF-4✻50 includes 2 kinds of version-✻E and version-✻F. The functions are exactly the same between two versions. As for details, refer to page-1.

INDEX

CASIO®

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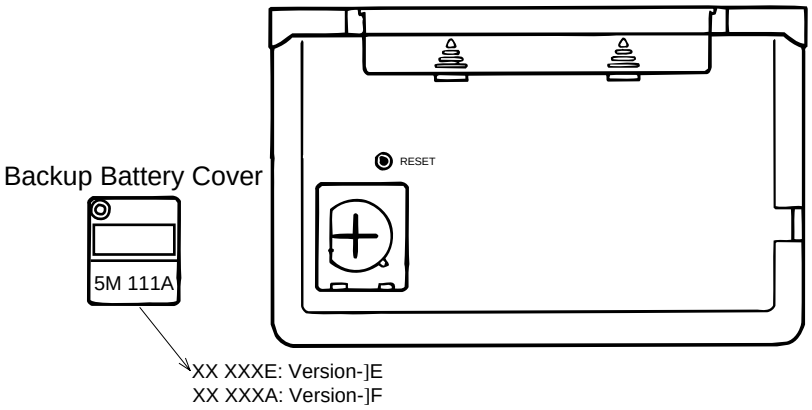
VERSION TABLE

Model	Version		Note	Capacity	PCB ass'y	TAB-LSI
CSF-4450	Version✻E	AE	Standard	32KB	Z855-1E ASS'Y (MC100012✻1)	OC3015-F1 SUB ASS'Y
CSF-4650		EE	Standard	64KB	Z855-1E ASS'Y (MC100012✻2)	
		FE	B.O.S.S.			
CSF-4950		IE	Standard	128KB	Z855-1E ASS'Y (MC100012✻3)	
		JE	B.O.S.S.			
CSF-4450	Version✻F	AF	Standard	32KB	Z855-1 ASS'Y (MC100011✻1)	COF3011-F1 SUB ASS'Y
CSF-4650		EF	Standard	64KB	Z855-1 ASS'Y (MC100011✻2)	
		FF	B.O.S.S.			
CSF-4950		lF	Standard	128KB	Z855-1 ASS'Y (MC100011✻3)	
		JF	B.O.S.S.			

CSF-4✻50 includes 2 kinds of version-✻E and version-✻F as shown in the table above. Although the TAB-LSI is different between two versions the functions are exactly the same.
A difference of two versions (✻E and ✻F) cannot be confirmed from the appearance, but it is recognized by production number on back of the backup battery cover as shown below.



When the last letter of production number is E it is version-]E. When A, version-]F.

FEATURES

3-color display
The display shows data in three colors: orange, blue and green. Different colors can be used to highlight specific dates in the Calendar, and even the color of text data can be specified.

Desktop Menu System
Simply point to the item that represent the function you want to use and press a button.

Do Today Function
Every time you turn on the unit, any Schedule Keeper items scheduled for that date appear on the display.

Powerful data bank functions
Telephone Directory, Business Card Directory, Memo, To Do, Expense Manager, Reminder, and Schedule Keeper.

Secret Drawer
A convenient place to lock up confidential information using a secret password.

Calendar - Schedule Keeper - Reminder - To Do linking
Reminder and To Do items are automatically displayed in the applicable Schedule Keeper dates. Markers appear on the Calendar display to indicate dates for which Schedule Keeper, Reminder, and To Do items are scheduled.

Timepiece with Home time and World Time
Dual timekeeping for two different locations.

Powerful alarm functions
In addition to the standard daily alarm, you can also set alarms for Schedule Keeper, Reminder, and To Do items.

Calculator
A 12-digit arithmetic calculator is just the thing for those quick, on-the-go calculations.

Data Communication
Exchange data with another CSF Unit or with a CASIO SF Unit.

SPECIFICATIONS

Memory Capacity

Memory capacity differs according to model. The following shows the memory capacity for each available model.

Model	Memory
CSF-4450	32K bytes (27,337 bytes)
CSF-4650	64K bytes (60,105 bytes)
CSF-4950	128K bytes (125,641 bytes)

The following shows the number or items that can be stored in each model (CSF-4450/4650/4950).

Telephone Directory

Approximately 1,200/2,700/5,700, under the following conditions:
- 8-character name
- 10-character telephone number

Approximately 600/1,300/2,900, under the following conditions:
- 8-character name
- 10-character telephone number
- 20-character address

Business Card Directory

Approximately 300/700/1,500, under the following conditions:
- 10-character employer name
- 8-character personal name
- 10-character telephone number
- 10-character position
- 10-character department
- 20-character address

Memo

Approximately 1,100/2,600/5,400, 20-character memos.

To Do

Approximately 700/1,600/3,400, under the following conditions:
- 20 character description
- Deadline set

Schedule Keeper

Approximately 700/1,500/3,200, under the following conditions:
- 20 character description
- Illustration used
- Starting time specified, alarm time set

Approximately 900/2,000/4,100, under the following conditions:
- 20 character description
- Illustration not used
- Starting time specified, no alarm time

Reminder

Approximately 1,500/3,300/6,900, under the following conditions:
- 10 character description
- Alarm time set

Approximately 1,700/3,700/7,800, under the following conditions:
- 10 character description
- No alarm time

Expense Manager

Approximately 800/1,800/3,800, under the following conditions:
- 10 character description
- Expense type and payment type set

Main Modes:

Telephone Directory, Business Card Directory, Memo, Schedule Keeper, To Do, Expense Manager, Reminder, Calendar, Home Time, World Time and Calculator

Data storage:

Storage and recall of telephone, business card, memo, schedule, to do, expense, reminder data; calendar display; secret drawer; editing; memory status display

Clock:

Worldtime; reminder alarm; schedule alarm; to do alarm; daily alarm; accuracy under normal temperatures: ±3 seconds average

Calculation:

12-digit arithmetic calculations; arithmetic constants (+, -, ×, ÷); independent memory; percentages; square roots; 24-digit approximations; date calculations; other mixed calculations

General:

Display element: 16-column × 4-line LCD

Main component: LSI

Power supply:

Main:	Two AAA-size batteries (Type: R03 (UM-4) or LR03 (AM4))
Back-up:	One CR2032 lithium battery

Current consumption:

ON:	4 mA or under (TEL mode)
OFF:	25 μA or under
Backup Battery:	10 μA or under

Low Battery message:

Main battery:	2.5 V ± 2.5%
Backup battery:	2.6 V ± 2.5%

Forced power off:

2.3 V ± 2.5%

Battery life:

Main: Approximately 100 hours continuous display in Telephone Directory (approximately 180 hours on type LR03 (AM4)); approximately 80 hours repeating one minute of input and 10 minutes of display in Telephone Directory (approximately 150 hours on type LR03 (AM4))

Back-up: 5 years if main batteries are replaced as soon as they become weak. 2 year if dead main batteries are left in the unit.

Power consumption: 0.06 W

Auto power off: Approximately 6 minutes after last key operation

Operating temperature: 0°C ~ 40°C (32°F ~ 104°F)

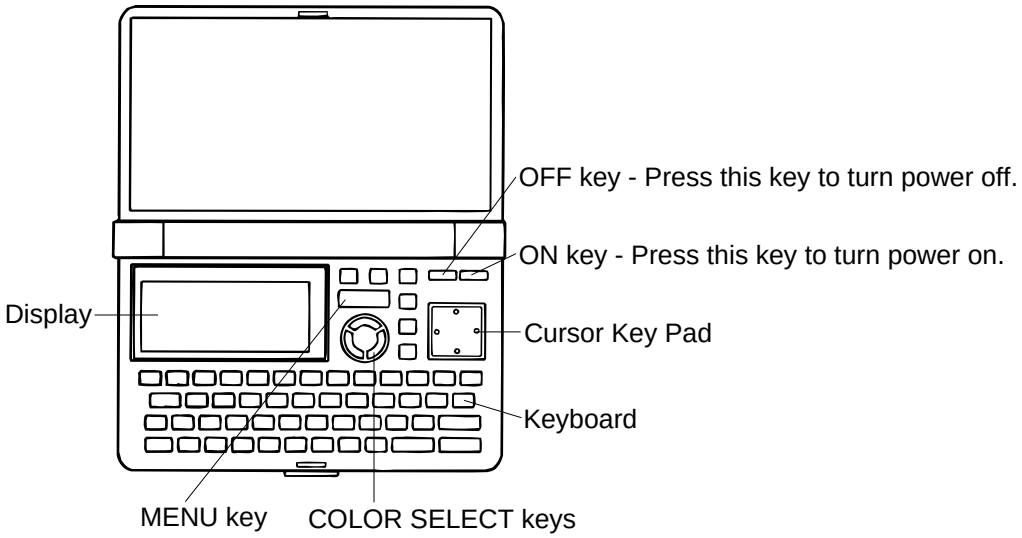
Dimensions:

Unfolded: 10.5H × 145W × 176.5D mm ($^{7}/_{16}$"H × $5^{11}/_{16}$"W × $6^{15}/_{16}$"D)

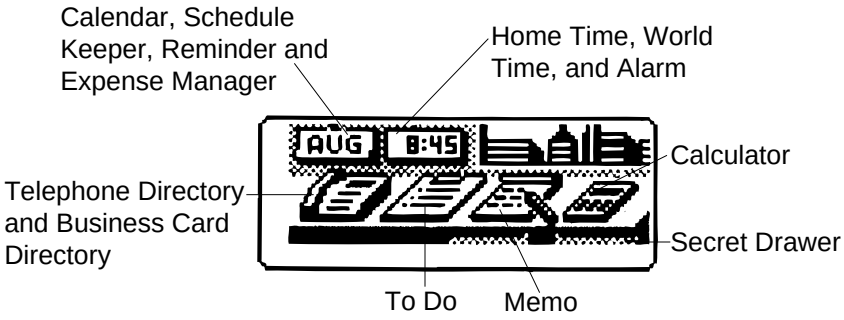
Folded: 14.2H × 145W × 95D mm ($^{9}/_{16}$"W × $5^{11}/_{16}$"W × $3^{3}/_{4}$"D)

Weight: 142.2 g (5 oz) including batteries

GENERAL GUIDE


OFF key - Press this key to turn power off.
ON key - Press this key to turn power on.
Display
Cursor Key Pad
Keyboard
MENU key
COLOR SELECT keys

About the desktop...
The desktop gives you point-and-select access to the data management features of the CSF Unit. Whenever you want to return to the desktop, simply press the **MENU** button.



- Note that one of the icons on the desktop is flashing, This means that the icon is selected.

How to use the desktop
1. Use the cursor keys to move the flashing around the desktop until the one you want is selected (flashing).
2. After selecting an icon, press **OK** to access the functions of that icon.
   - Selecting some icons (like the Clock and Telephone) cause another selection screen to appear.
   - Details on actually using the features and functions that you access from the desktop are described in the other sections of this manual.

Changing the Desktop Screen's Window Scenery

You can change the scenery that is outside the desktop screen's window to any one of the scenes shown below. Simply display the desktop screen and press the **COLOR SELECT** key that corresponds to the scenery you want to select.

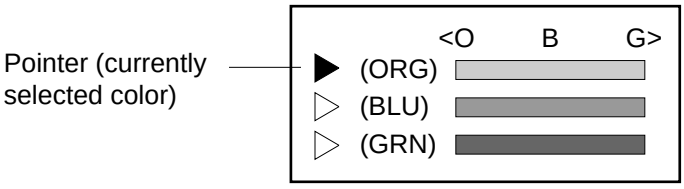
ORG: Night-time city scene
BLU: Daytime city scene
GRN: Beach scene

Adjusting the Display Contrast

The following procedure describes how to adjust the color contrast, which controls the relative darkness and lightness of each color on the display.

To adjust the display contrast

1. While the desktop is on the display, press **FUNC**.
2. Press **1** to select ***SYSTEM***.
3. Press ▼ to display the second ***SYSTEM*** menu.
4. Press **1** to select ***CONTRAST***.



5. Use ▲ and ▼ to move the pointer to the color whose contrast you want to set.
6. Use ◀ and ▶ to adjust the contrast of the currently selected color.
   - You can adjust the overall contrast of the display by pressing ⏫ or ⏬ .
   - Whenever you press one of the **COLOR SELECT** keys, the color contrast is returned to its initial default setting.
7. After you finish adjusting the display contrast, press **OK**.
   - Color contrast settings are registered as soon as you make them. Because of this, pressing either **OK** or **ESC** quits the color contrast procedure only. Pressing **ESC** does not return the color contrast setting to what is was.

Notes

- Temperature changes can cause changes in background color and the tint of display colors .
- Low battery power can also cause flickering of the display and changes in the tint of display colors.

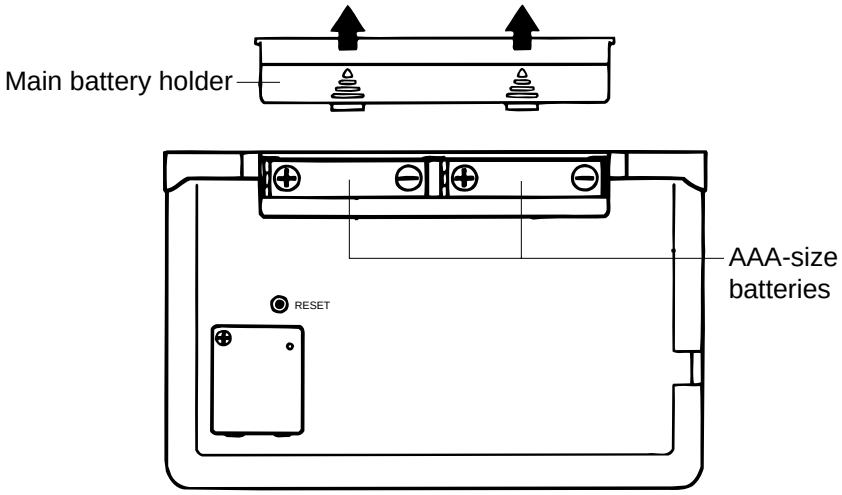
BATTERY REPLACEMENT

Main Battery

Before replacing the main batteries, note the following precautions:

- Do not remove the main batteries from the CSF Unit while back-up battery is removed.
- Be sure to replace both batteries at the same time, and do not use an old battery with a new one.

1. Press **OFF** to switch power OFF.
2. Press down at the two locations indicated by Δ, and slide in the direction indicated by the arrow.



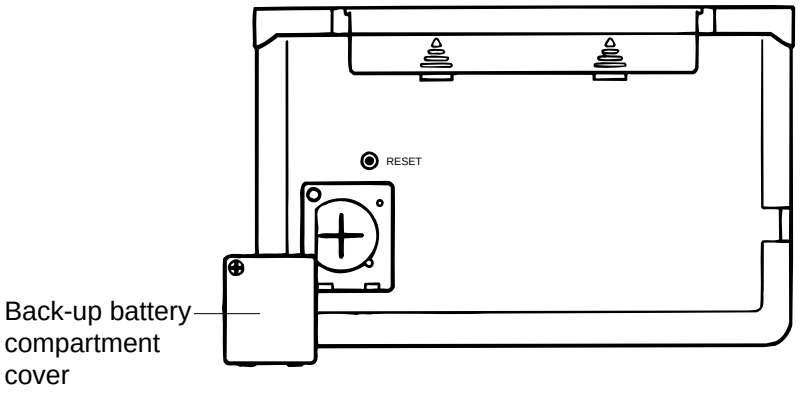
3. Remove both old batteries and replace them with two new ones.
   • Make sure that the positive (+) and negative (-) ends are facing correctly.
4. Replace the holder.
5. Turn on power.
   • The Home Time screen always appears whenever you turn power on for the first time after replacing batteries.
6. Check the Home Time setting and make changes if necessary.

Back-up Battery

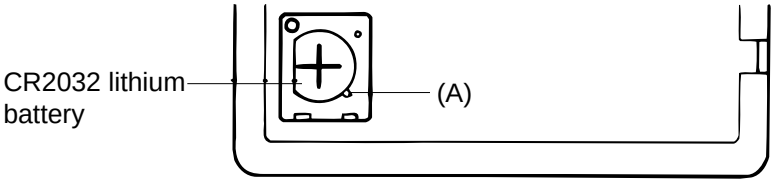
Before replacing the back-up battery, note the following precautions:

- Do not remove the back-up battery from the CSF Unit while main batteries are removed.
- Be sure to replace the back-up battery at least once every five years. Otherwise, you run the risk of losing data stored in memory.

1. Press **OFF** to switch power OFF.
2. Remove the screws that hold the back-up battery compartment cover in place, and remove the cover.

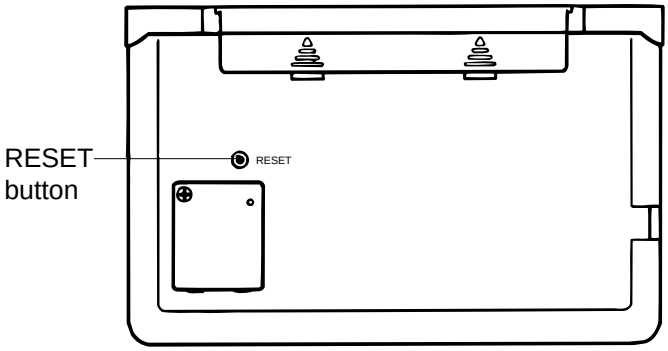


3. Insert a thin, pointed object into (A) and remove the old battery.



RESET OPERATION

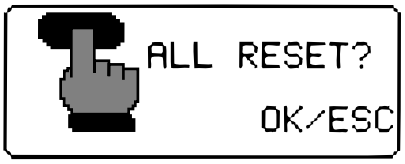
1. Press **ON** to switch power ON.
2. Press the RESET button with a thin, pointed object.



Warning!

The next step deletes all data stored in the CSF Unit's memory. Make sure that you really want to delete the data before you continue!

3. Press **1** to select ***ALL RESET***.



Note

• The above message always appears in English, regardless of the system language setting.

4. Press **OK** to reset the memory and delete all data or **ESC** to abort the reset operation without deleting anything.
   • After the ALL RESET operation is complete, the LANGUAGE screen appears on the display.
5. Check the Home Time setting and make changes if necessary.

Following the all reset operation, the CSF Unit settings are initialized as noted below.

Home Time:	LON 1996/1/1 MON 12:00 AM 12-hour format
World Time:	NYC
Daily Alarm:	12:00 PM
Sound:	Data alarm (Schedule alarm, Reminder alarm and To Do alarm) — ON Daily alarm — OFF Key — ON
Messages:	English
Character input:	CAPS

To perform SECRET RESET

Important!

- The following procedure erases all data stored in the secret drawer. Make sure you do not need any of the data in the secret drawer before deleting it. You can transfer data you might need to the desktop (page 9) before performing this procedure.
- Note that this unit has no procedure for deleting the password only (and leaving secret drawer contents) or secret drawer contents only (and leaving the password).

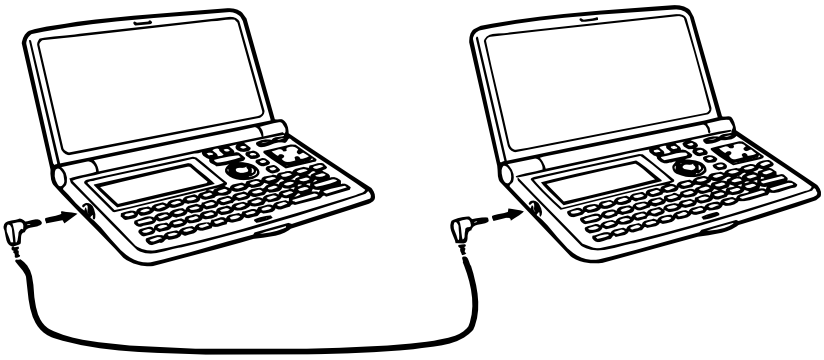
To perform a SECRET RESET, follow the same procedure as that described under "RESET OPERATION" on page 7, except you should select "***SECRET RESET***" in step 3.

TO SAVE THE DATA

CSF-4450/4650/4950 can transfer the customer's data to another CSF unit with memory protection only when replacing the LCD or the outer case.

To connect the CSF Unit to another CSF Unit

1. Make sure that the power of both units are switched off.
2. Remove the covers from the data communications jacks on the two CSF Units.
3. Connect the two units using the SB-62 cable.



How to transfer the data

1. Under calculator mode, set the date of the slave unit to Feb. 3rd, 1901.

Operation : [ON] [OK] [1] [DATE] [2] [DATE] [3] [DATE] [M+]

If you do not set the date, the "PASSWORD" is not transferred to the slave unit.

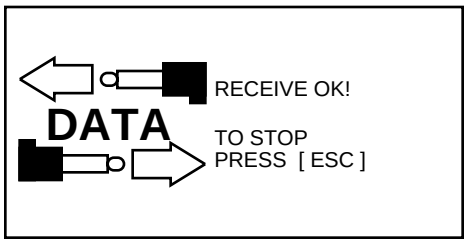
2. Check the hardware parameters of both unit, and if both units have another condition, reset as follows;

[MENU] [FUNC] [2] [3]

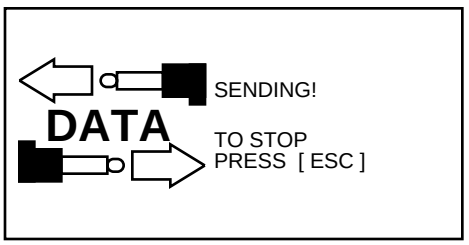
```
////////////  SET UP PAR. ////////////
 PARITY                E/O/N
 BIT LENGTH             7 / 8
 BPS                 4800 / 9600
```

[OK]

3. Set up the slave unit.
   - On the desktop, select the telephone icon and press [OK].
   - Select the home icon and press [OK].
   - [FUNC] [2] [2]



4. Set up the customer's unit.
   [MENU] [FUNC] [2] [1] [3] [OK]



If you can not succeed to transfer the data, press ESC key on both units and try to transfer the data again following the procedure above.

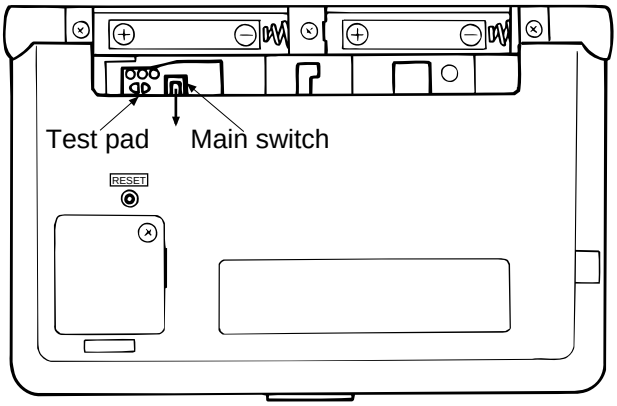
PIN FUNCTION

CPU HCD62121A02 (HC-3017) : COB

NOTE: The CPU is bonding on the PCB. If the CPU is defective, replace the Z855-1 PCB ass'y because the CPU cannot be replaced.

Pin No.	Pin Name	Input/Output	Function
1 ~ 14	KO14 ~ KO1	O	Key common signal
15 ~ 22	KI8 ~ KI1	I	Key input signal
23	BUFON	O	Chip select for RAM
24	IT2	I	Interrupt input
25	IT0	I	Interrupt input
26 ~ 46	AO20 ~ AO0	O	Address bus
47 ~ 54	IO0 ~ IO7	I/O	Data bus
55	OEBO	O	Output enable signal for RAM
56	WEBO	O	Write enable signal for RAM
57 ~ 64	CS10BO ~ CS3BO	O	Chip selecting signals
65	OPT7	O	Reset signal output
69 ~ 72	OPT3 ~ OPT0	O	Changeover signal
73	PORT7	I	Receiving terminal for data communication
74	PORT6	I	Receiving terminal for data communication
75	PORT5	O	Transmitting terminal for data communication
76	PORT4	O	Transmitting terminal for data communication
80	PORT0	I	Low battery message for back-up battery (2.6V)
81	VSS	I	GND
82	PI	I	1MHz clock input
83	PO	O	1MHz clock output
84	VDD	I	+3V source
85	XO	O	4.3MHz clock output
86	XI	I	4.3MHz clock input
87	VCC	I	+3V source
88	VREG2	O	Voltage for main switch detection
89, 90	TS1, TS2	—	Test terminals of factory purpose only
91	VSSR	I	GND
92	BZZ1	O	Buzzer signal output
93	BZZ2	O	Buzzer signal output
94	VSS	I	GND
95	OCLK	O	Clock output
96	ITOFF	I	Switching terminal from main switch
97	TEMU	—	Test terminals of factory purpose only
98	SW	I	Receiving terminal for reset switch
99	VDB	I	+3V source
100	VREG1	—	Test terminals of factory purpose only
101	VREG4	O	+3V source for ROM
102	VREG5	—	Test terminals of factory purpose only
103	VDT1I	I	Forced power off detecting terminal (2.3V)
104	VDT2I	I	Low battery message for main battery (2.5V)
105	VREG3	—	+3V source for RAM

DIAGNOSTIC PROGRAM



Bottom View

To enter the diagnostic program, proceed as follows;
1 : Open the battery cover and slide the main switch to the arrow side.
2 : Press ON while shorting the Test pad.

STEP	OPERATION	DISPLAY	NOTE
Enter the diagnostics	Press ON while shorting the Test pad.	///// SELF TEST PROG ///// PRESS OK KEY QUIT BY OFF KEY CASIO OCT 1995	
Main menu	OK	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	
Display Check	1	DISPLAY 1 DISPLAY 2 FRAME FREQ.	
	1	No color, no display	
	OK	Orange color is displayed	
	OK	Green color is displayed	
	OK	Blue color is displayed	
	OK	Checkers are displayed	
	OK	Reverse checkers are displayed	
	OK	Frame is displayed	
	OK	Dots at the 4 corners are displayed	
	OK	Vertical 4 colors are displayed	
	OK	Horizontal 4 colors are displayed	
	OK	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	

STEP	OPERATION	DISPLAY	NOTE
Memory Check	2	MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	
	1	RAM WRITE 1	Write the test pattern 1 into RAM
		MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	After 1 sec.
	2	EXECUTING !!	Read the test pattern 1 from RAM
		CMPLETE !! 32/64/128 KB	After 1 sec.
Memory Check	OK	MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	
	3	RAM WRITE 2	Write the test pattern 2 into RAM
		MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	After 1 sec.
	4	EXECUTING !!	Read the test pattern 2 from RAM
		CMPLETE !! 32/64/128 KB	After 1 sec.
	OK	MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	
	5	XXXX	Wiring check for ROM
Memory Check	OK	MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	
	6	CHECK SUM TY SZ SUM XOR C5 0 512 XXX XX	Check SUM value Version- ✻E = 65D6 Version- ✻F = E146
	OK	MEMORY 3 WR 2 4 READ 2 1 WR 1 5 DUMP 2 READ 1 6 CHKSUM	
	ESC	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	

STEP	OPERATION	DISPLAY	NOTE
KEY CHECK	3	KEY & TIME 1 RANDOM 2 AUTO 3 TIME	
	1		No display
	ESC, 1, 2, 3.....	16 17 18 19	To push the key sequentially that key code is being appeared in the display.
	OK	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	
Buzzer Check	4	BUZZER 1 BEEP 2 ALARM 1 3 ALARM 2	1 : Key input sound 2 : Sound alarm 1 3 : Sound alarm 2
	ESC	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	
Interface Check	5	I/F 1 TRANS 2 RECEIVE 7N9 3 ASCII 4 LOOP	The parameter can be changed as follows; Key "5" : Bit length 7 or 8 bit Key "6" : Parity bit N(Non), E(Even) or O(Odd) Key "7" : BPS 9(9600) or 4(4800)
	1	EXECUTING !!	Send the code "H"
	2	No display	Display the received charactor.
	3	EXECUTING !!	Send the ASCII code
	4	EXECUTING !!	Loop back check
	ESC	I/F 1 TRANS 2 RECEIVE 7N9 3 ASCII 4 LOOP	
CONTRAST ADJ.	6	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	
	Contrast up : ▲▲ or SHIFT + ▼▼ Contrast down : ▼▼ or SHIFT + ▼▼	//////////// CONTRAST //////////// <O B G> ▶ (ORG) ▷ (BLU) ▷ (GRN)	Contrast adjustment
	Cursor keys	//////////// CONTRAST //////////// <O B G> ▶ (ORG) ▷ (BLU) ▷ (GRN)	Adjust the color using cursor keys until the primary colors appear accurately.

STEP	OPERATION	DISPLAY	NOTE
	OK	TEST 4 BUZZER 1 DISP 5 I/F 2 MEMORY 6 CONT 3 KEY 7 RESET	
RESET	7	NAME? TELEPHONE 0	END

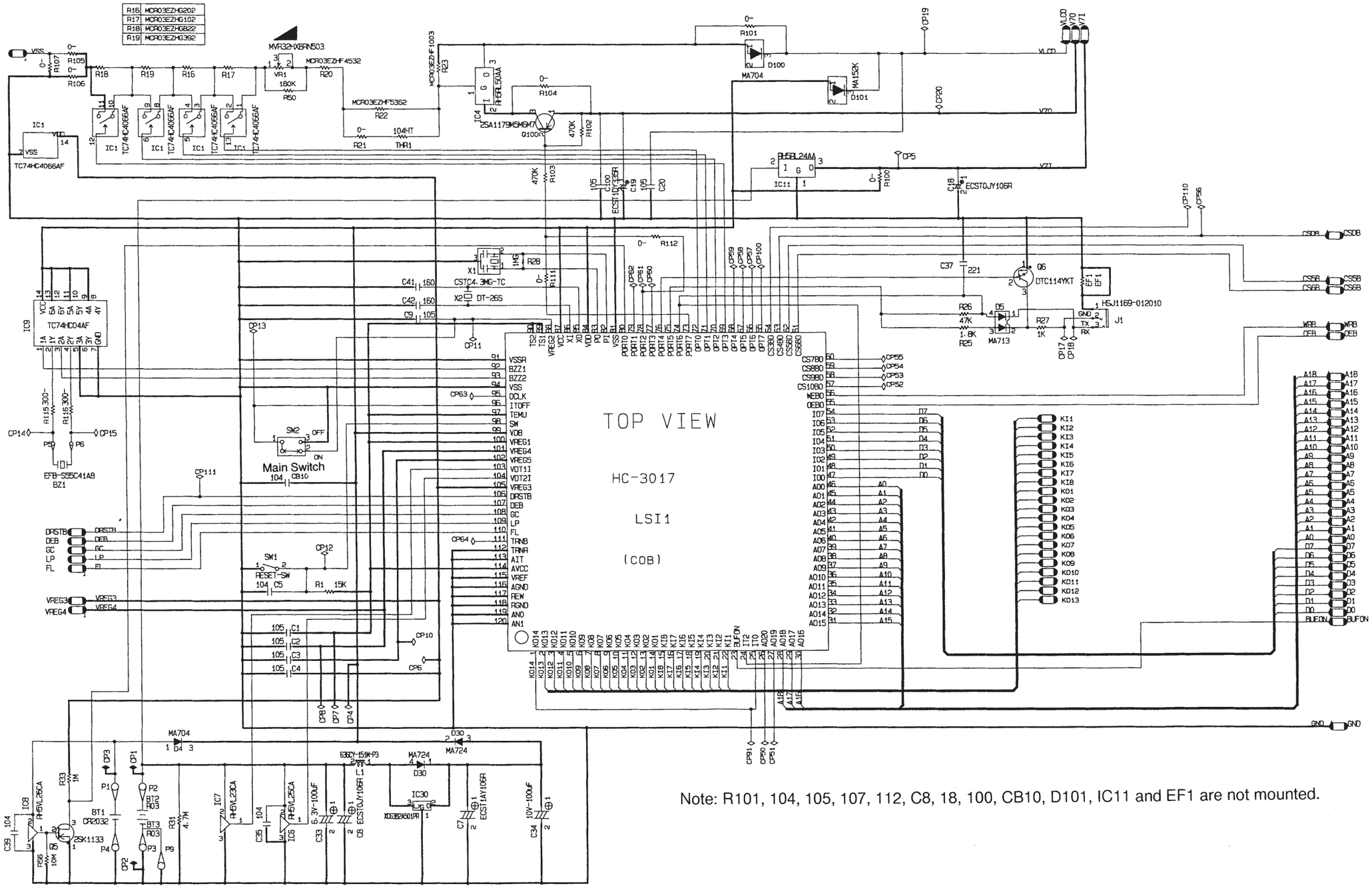
ERROR MESSAGE

Message	Meaning	Action
NO DATA!	Search operation attempted when no data is stored in memory.	Current search operation cannot be performed.
DATA ITEM NOT FOUND!	Data specified in search operation does not exist in memory.	Change specification or cancel search.
MEMORY FULL!	No more room in memory for storage of data.	Delete unnecessary data items from memory.
ALARM TIME ALREADY USED!	Attempt to set a Schedule Keeper, a Reminder or a To Do alarm time that is already used for another entry.	Set a different alarm time or change the existing alarm time to another one.
ALARM TIME ALREADY PASSED!	Attempt to set a Schedule Keeper, a Reminder or a To Do alarm time for a time/date that is already passed.	Set a different alarm time (for a future time/date).
SECRET DATA!	Alarm for a secret memory area data item is sounding.	Enter the secret memory area to view details of the alarm.
PASSWORD MISMATCH!	Attempt to enter the secret memory area using a password that does not match the one preset for the secret area.	Use the correct password.
TRANSMIT ERROR!	Error during data communications.	Cancel the data communications operation and try again.
STOPPED!	Data communication has been interrupted.	Stop the data communication procedure and try again.
SAME TYPE ALREADY USED!	Attempt to store a label that is identical to one already stored.	Use a different label.
NOTICE! CONSULT THE OWNER'S MANUAL!	• This message appears when this is the first time you ever turned on the CSF Unit. • Data corrupted by strong impact, electrostatic charge, etc.	Perform the ALL RESET operation.

SCHEMATIC DIAGRAMS

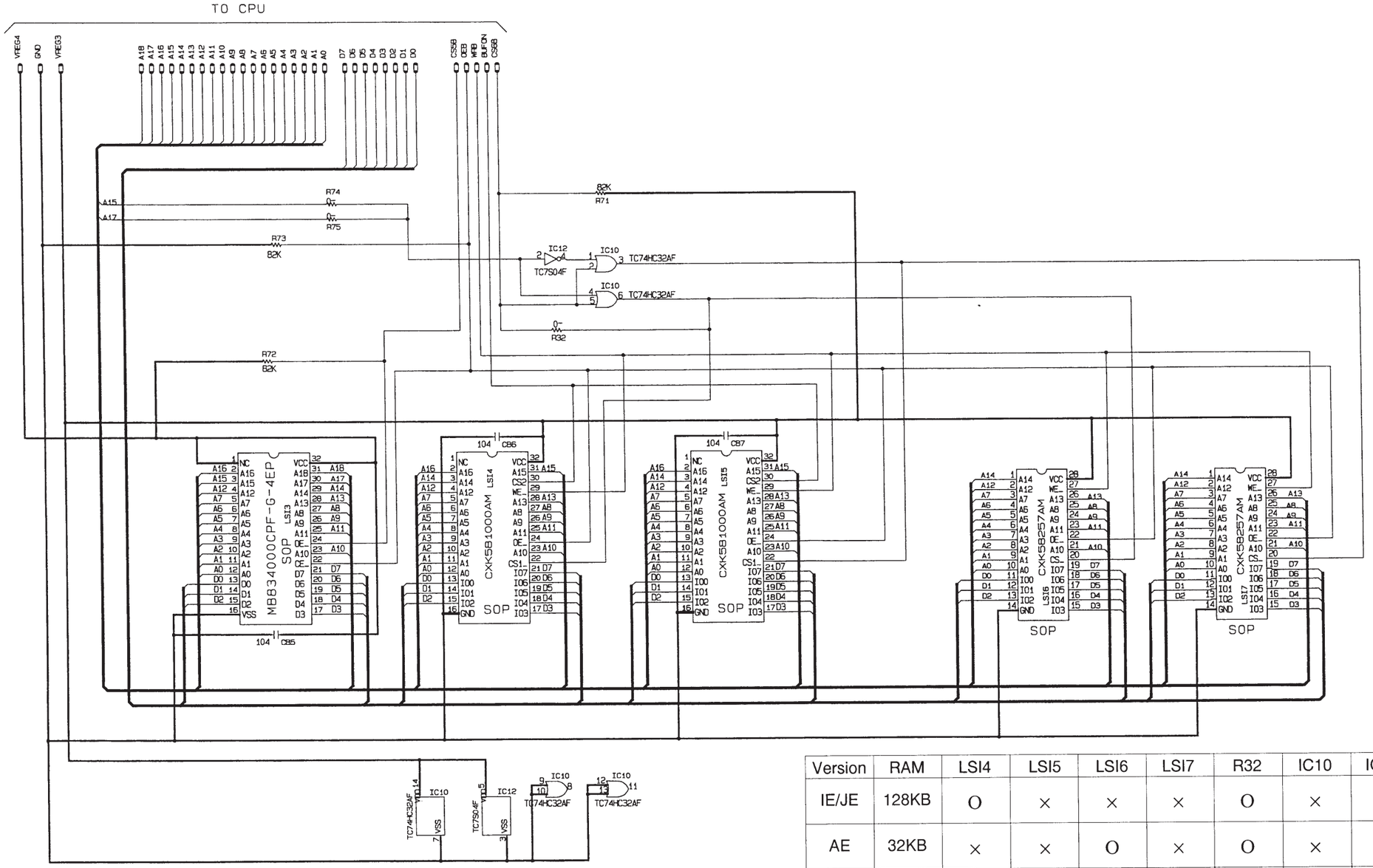
VERSION*E

Main Block-1/2



Note: R101, 104, 105, 107, 112, C8, 18, 100, CB10, D101, IC11 and EF1 are not mounted.

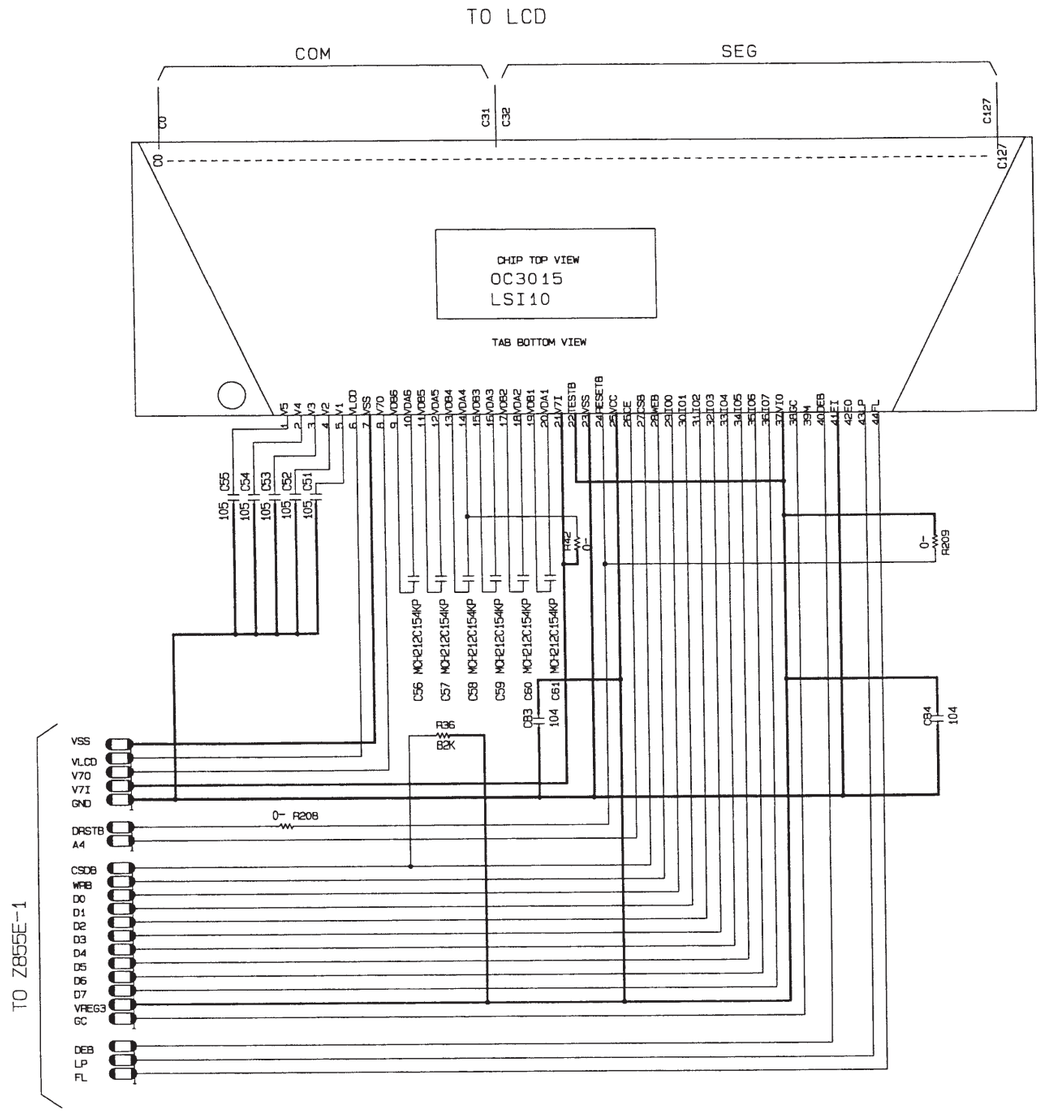
VERSION*E
Main Block-2/2

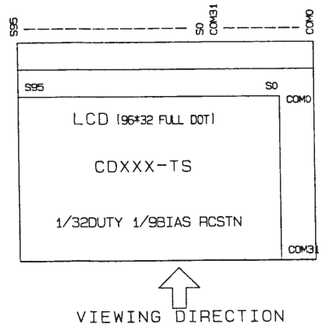


Version	RAM	LSI4	LSI5	LSI6	LSI7	R32	IC10	IC12	R74	R75	CB7
IE/JE	128KB	O	×	×	×	O	×	×	×	×	×
AE	32KB	×	×	O	×	O	×	×	×	×	×
EE/FE	64KB	×	×	O	O	×	O	O	O	×	O

VERSION*E

Display Block



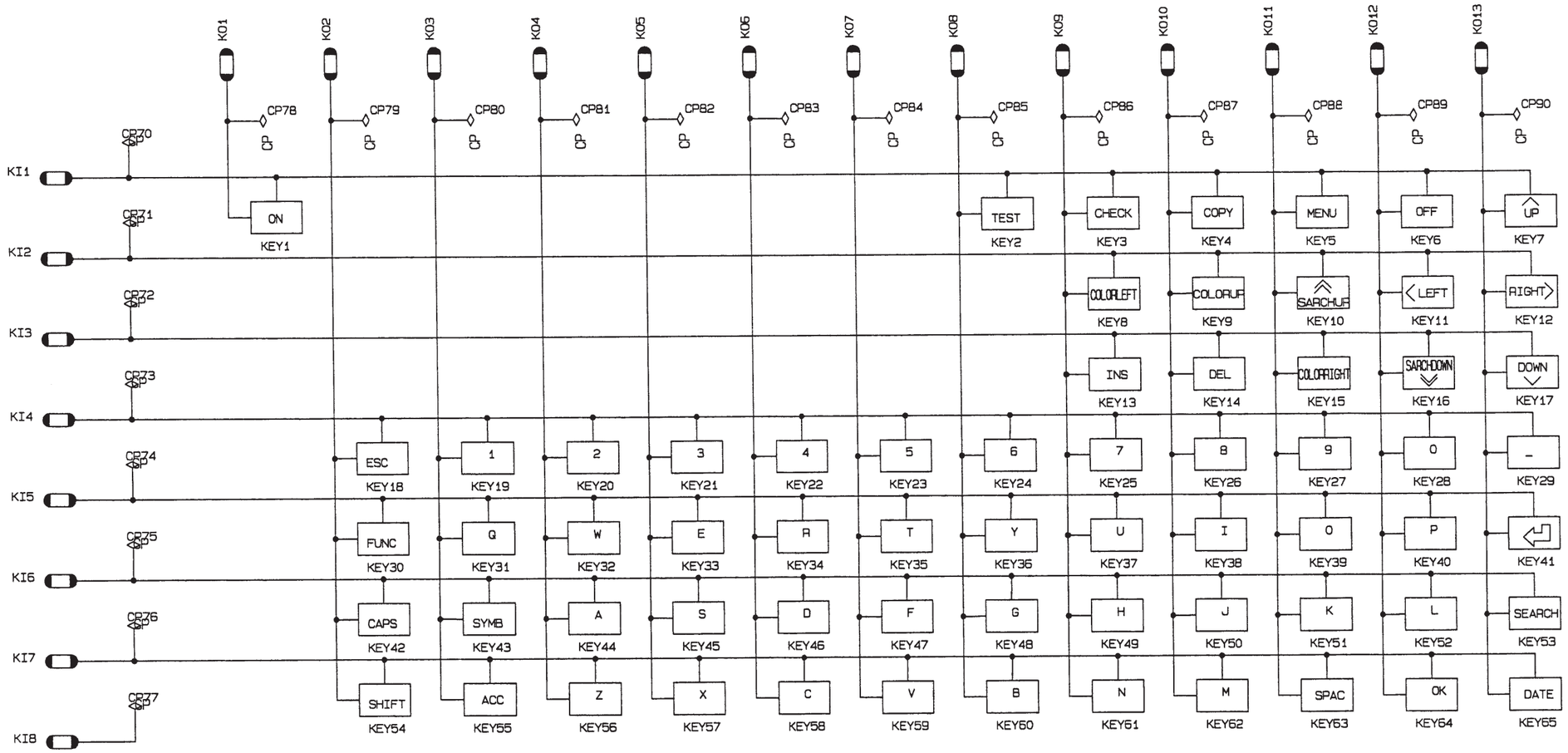


LCD-TAB connection

LCD	COM0~COM31	S0~S95
TAB(OC3015)	C0~C31	C32~C127

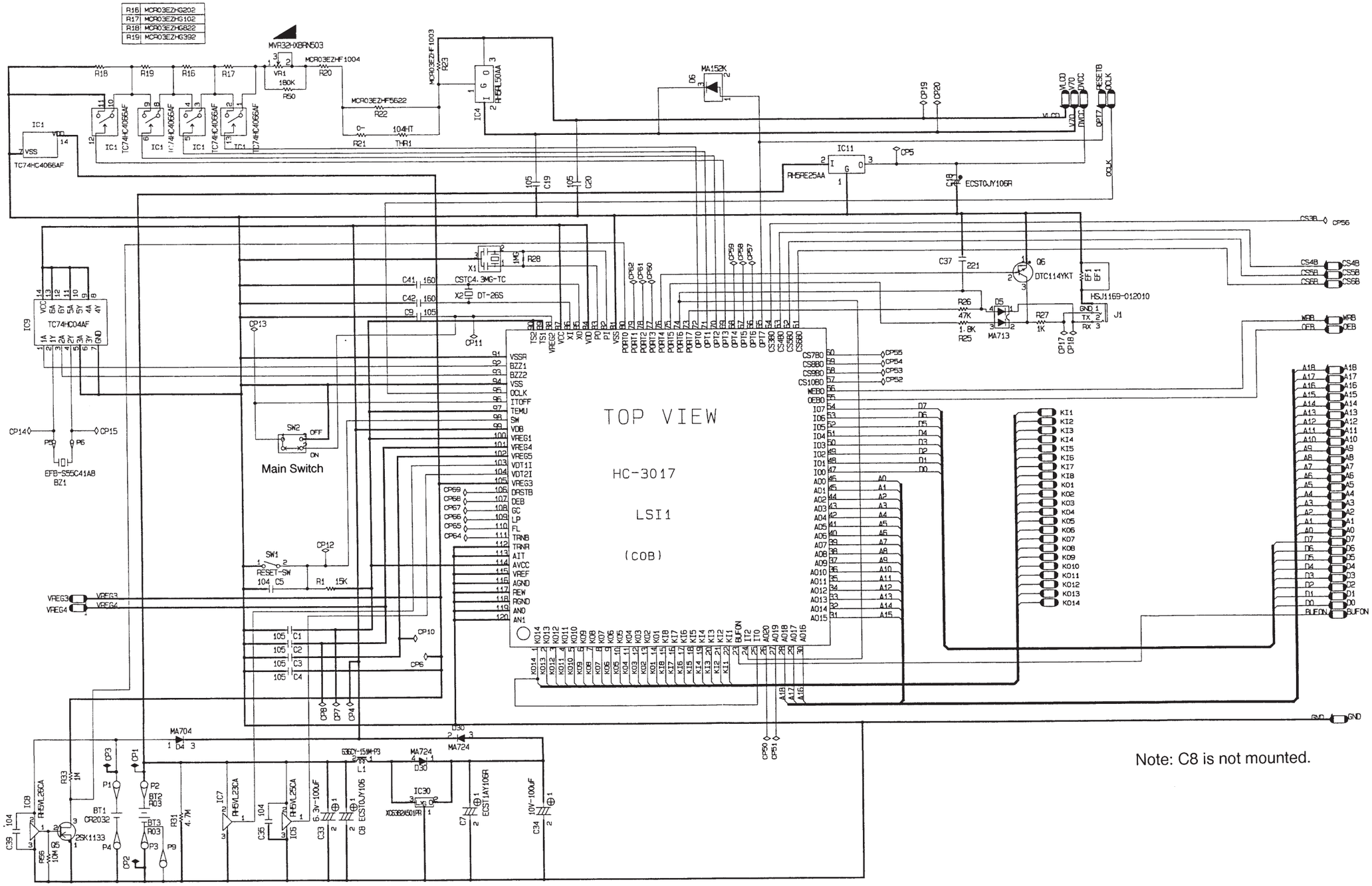
Note: C58, 59, 60, 61 and R209 are not mounted.

VERSION*E
Key Matrix

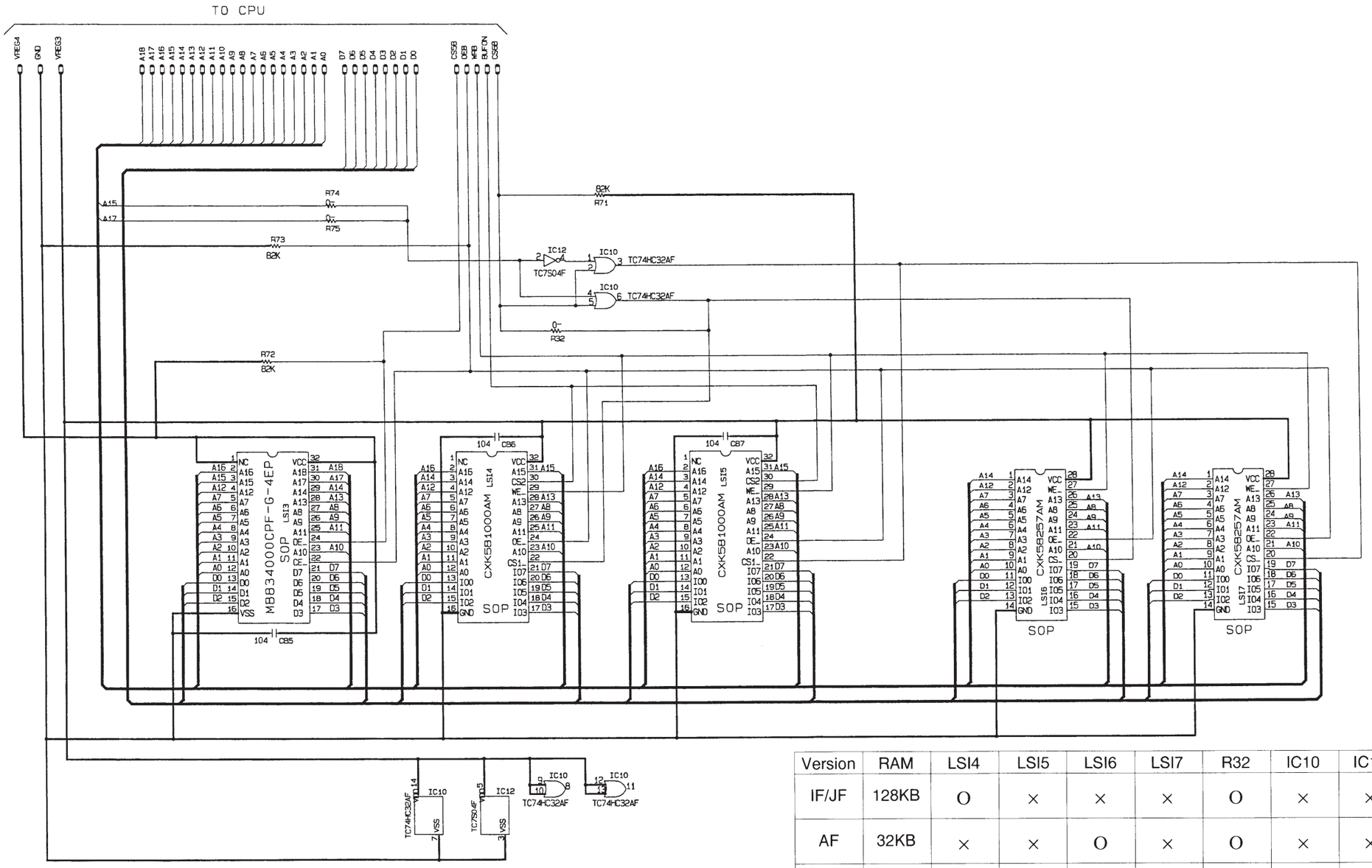


VERSION*F

Main Block-1/2

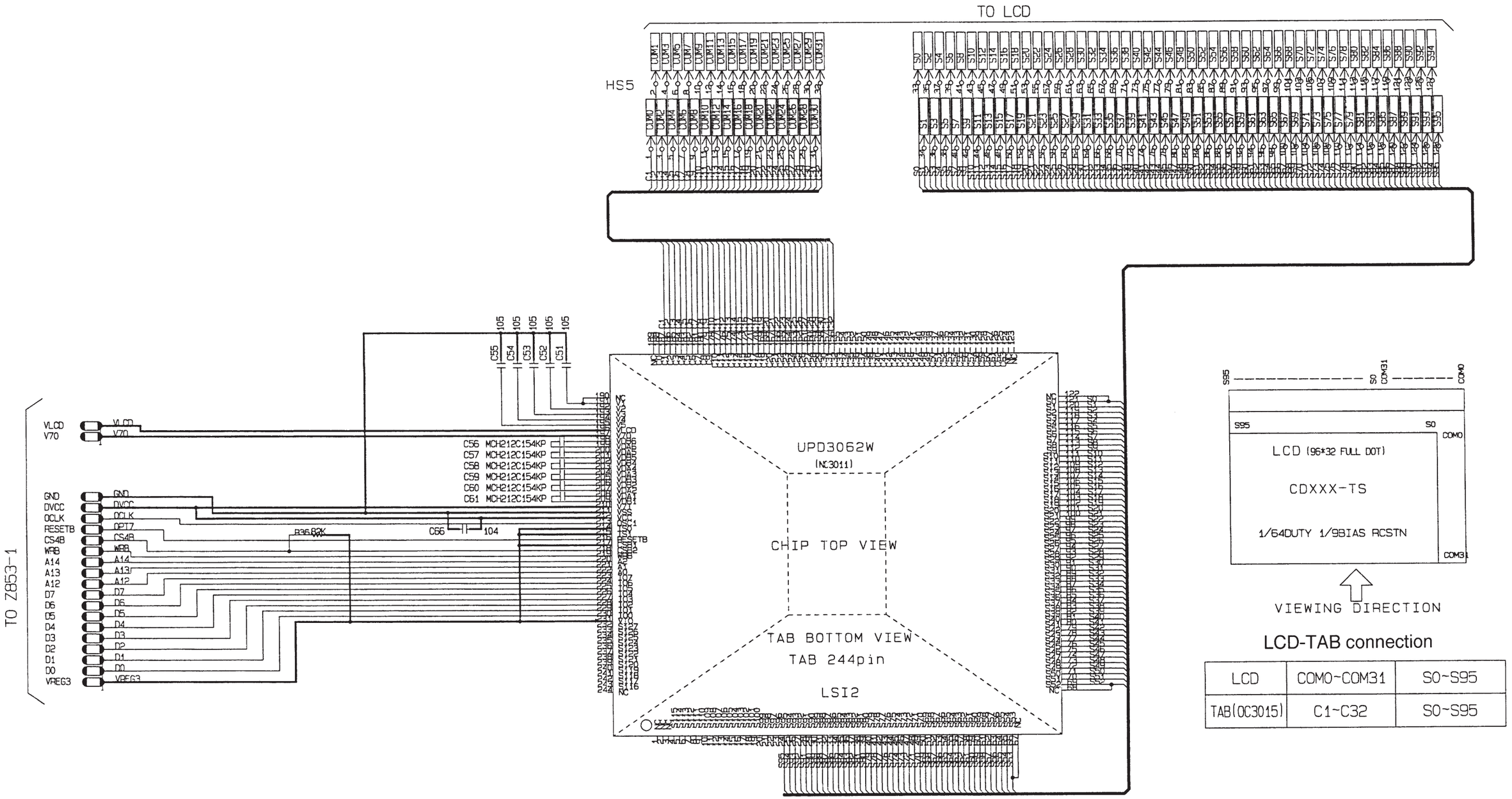


VERSION*F
Main Block-2/2



Version	RAM	LSI4	LSI5	LSI6	LSI7	R32	IC10	IC12	R74	R75	CB7
IF/JF	128KB	O	×	×	×	O	×	×	×	×	×
AF	32KB	×	×	O	×	O	×	×	×	×	×
EF/FF	64KB	×	×	O	O	×	O	O	O	×	O

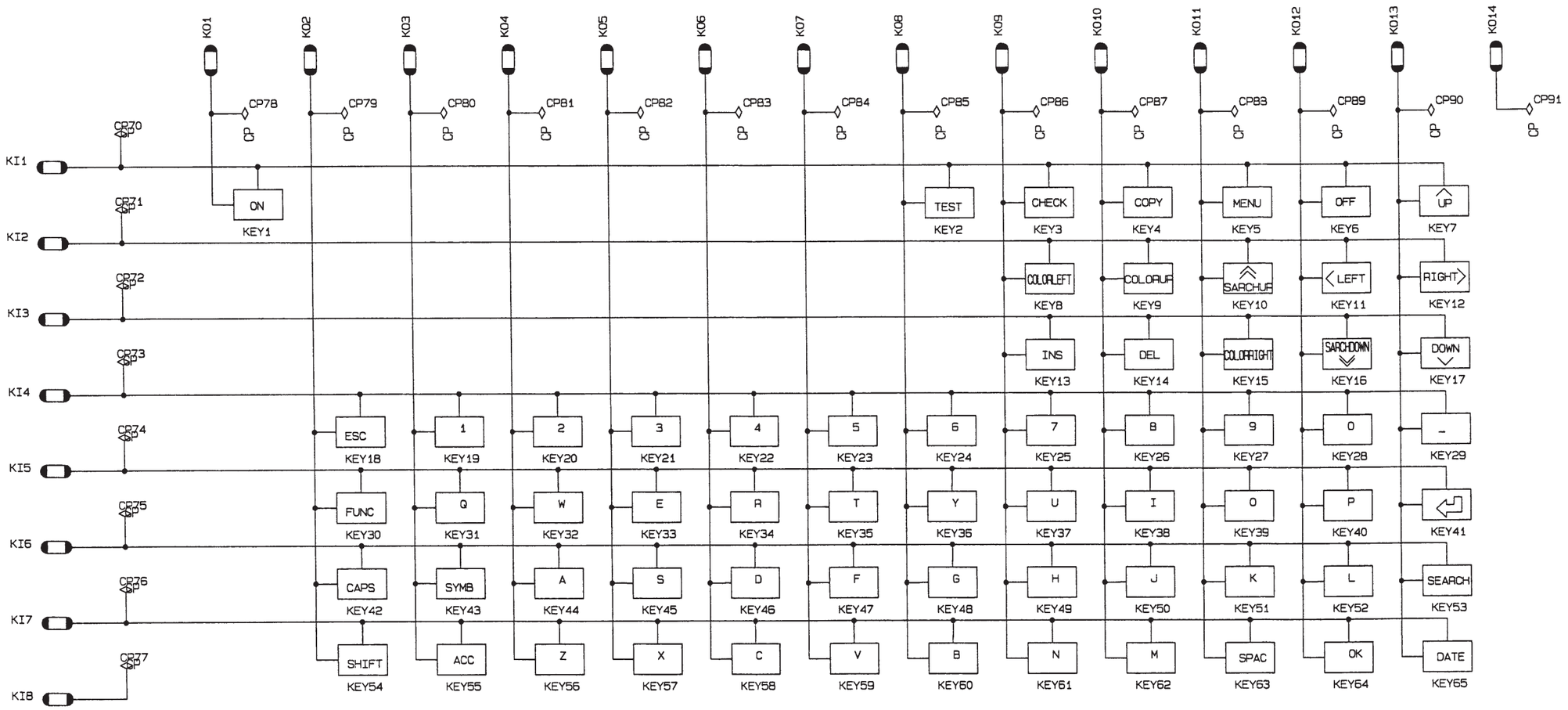
VERSION*F
Display Block



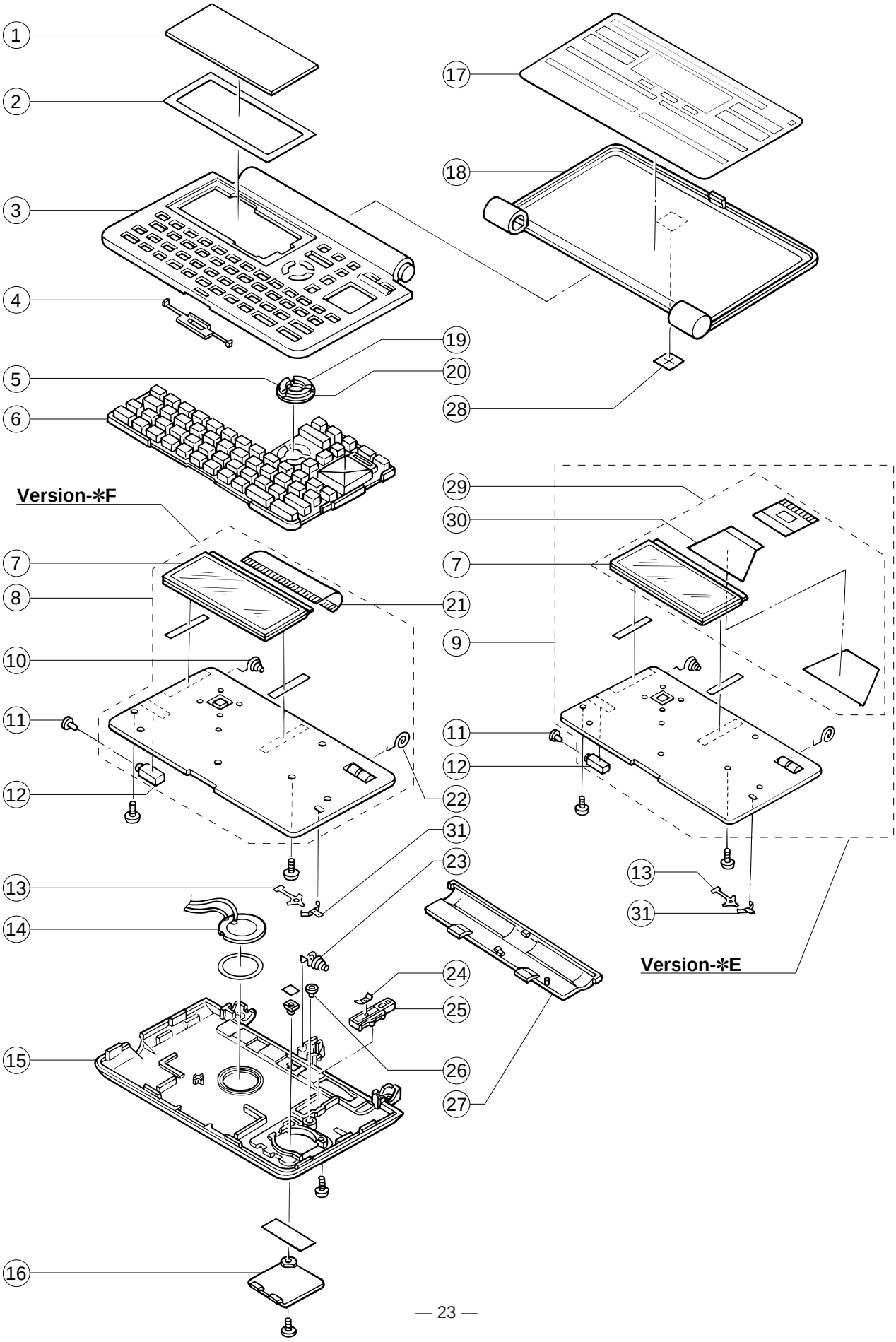
LCD-TAB connection

LCD	COM0~COM31	S0~S95
TAB(0C3015)	C1~C32	S0~S95

VERSION*F
Key Matrix



EXPLODED VIEW



PARTS LIST

N	Item	Code No.	Parts Name	Specification	Quantity										M	FOB Japan N.R.Yen Unit Price	R
					AE	AF	EE	FE	EF	FF	IE	IF	JE	JF			
					4450		4650				4950						
			PCB ASS'Y(Z855-1 ASS'Y & Z855-1E ASS'Y)														
N	7	3335 6055	LCD	CD1034-TS	0	1	0	0	1	1	0	1	0	1	1		B
N	10	6417 2620	Battery Spring M-B	C413028-1	1	1	1	1	1	1	1	1	1	1	20		X
	12	3501 6405	Mini Jack	HSJ1169-012010	1	1	1	1	1	1	1	1	1	1	5		C
N	21	5610 9160	Heat Seal Z855	MC300555-1	0	1	0	0	1	1	0	1	0	1	5		B
N	22	6417 2610	Battery Spring P-B	C311911-1	1	1	1	1	1	1	1	1	1	1	20		X
N	29	6417 4840	LCD ASS'Y	MC300003*1	1	0	1	1	0	0	1	0	1	0	1		B
	D30	2390 1561	Schottky Diode	MA724-(TX)	1	1	1	1	1	1	1	1	1	1	10		C
	D4	2390 0875	Chip Diode	MA704-(TX)	0	1	0	0	1	1	0	1	0	1	20		C
	D4, D100	2390 0875	Chip Diode	MA704-(TX)	2	0	2	2	0	0	2	0	2	0	20		C
	D5	2390 0364	Schottky Diode	MA713-TX	1	1	1	1	1	1	1	1	1	1	10		C
	D6	2390 1442	Chip Diode	MA152K-(TX)	0	1	0	0	1	1	0	1	0	1	20		C
N	IC1	2114 4795	CMOS IC	TC74HC4066AF(EL)	1	1	1	1	1	1	1	1	1	1	5		B
N	IC10	2105 5236	CMOS IC	TC74HC32AF(EL)	0	0	1	1	1	1	0	0	0	0	10		B
	IC11	2105 4704	CMOS IC	RH5RE25AA-T1	0	1	0	0	1	1	0	1	0	1	5		B
N	IC12	2105 1561	CMOS IC	TC7S04F-TE85R	0	0	1	1	1	1	0	0	0	0	10		B
	IC30	2105 5096	CMOS IC	XC6382A501PR	1	1	1	1	1	1	1	1	1	1	1		B
	IC4	2105 2737	CMOS IC	RH5RL50AA-T1	1	1	1	1	1	1	1	1	1	1	10		B
	IC6	2105 4228	MOS IC	RH5VL25CA-T1	1	1	1	1	1	1	1	1	1	1	10		B
	IC7	2105 4914	MOS IC	RH5VL23CA-T1	1	1	1	1	1	1	1	1	1	1	10		B
	IC8	2105 4144	MOS IC	RH5VL26CA-T1	1	1	1	1	1	1	1	1	1	1	10		B
N	IC9	2105 5222	CMOS IC	TC74HC04AF(EL)	1	1	1	1	1	1	1	1	1	1	10		B
	L1	3841 1799	Coil	636CY-151M-P3	1	1	1	1	1	1	1	1	1	1	5		C
	LSI2	6413 5320	COF3011-F1 SUB ASS'Y	A340214*1	0	1	0	0	1	1	0	1	0	1	1		B
N	LSI3	2012 2394	LSI	UPD23C4001EJGW-C17	0	1	0	0	1	1	0	1	0	1			B
N	LSI3	2012 3493	LSI	UPD23C4001EJGW-C31	1	0	1	1	0	0	1	0	1	0	1		B
	LSI4	2012 1659	LSI	TC551001BFL-10V(S)	0	0	0	0	0	0	1	1	1	1	1		B
N	LSI6	2012 3192	LSI	TC55257DFL-7085V	1	1	0	0	0	0	0	0	0	0	1		B
N	LSI6~7	2012 3192	LSI	TC55257DFL-7085V	0	0	2	2	2	2	0	0	0	0	1		B
N	Q100	2250 1281	Chip Transistor	2SA1179M5,M6,M7-TB	1	0	1	1	0	0	1	0	1	0	20		C
	Q5	2254 0287	Transistor(FET)	2SK1133-T1B	1	1	1	1	1	1	1	1	1	1	10		C
	Q6	2259 0959	Chip Transistor	DTC114YKT-146	1	1	1	1	1	1	1	1	1	1	20		C
	THR1	2755 0147	Thermistor	104HT	1	1	1	1	1	1	1	1	1	1	5		C
	VR1	2765 1869	Chip Volume	MVR32HXBRN503	1	1	1	1	1	1	1	1	1	1	20		C
	X1	2590 1967	Ceramic Oscillator	CSTC4.30MG-TC	1	1	1	1	1	1	1	1	1	1	5		C
	X2	7110 0642	Crystal Oscillator	DT-26S	1	1	1	1	1	1	1	1	1	1	5		C
			The following electronic parts will be not supplied from CASIO.														
	C1~4,C9, C19~20, C51~53		Chip Condensor	MCH312F105ZP	0	10	0	0	10	10	0	10	0	10			
	C1~4, C9,C20, C51~55		Chip Condensor	MCH312F105ZP	11	0	11	11	0	0	11	0	11	0			
	C5,C35, C39,C66, CB5~7		Chip Condensor	MCH183F104ZK	0	0	0	0	7	7	0	0	0	0			

Notes: N – New parts
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N	Item	Code No.	Parts Name	Specification	Quantity										M	FOB Japan N.R.Yen Unit Price	R
					AE	AF	EE	FE	EF	FF	IE	IF	JE	JF			
					4450		4650				4950						
	C5,C35, C39, CB4~7		Chip Condensor	MCH183F104ZK	0	0	7	7	0	0	0	0	0	0			
	C5,C35, C39,C66, CB5~6		Chip Condensor	MCH183F104ZK	0	6	0	0	0	0	0	6	0	6			
	C5,C35, C39, CB4~6		Chip Condensor	MCH183F104ZK	6	0	0	0	0	0	6	0	6	0			
	C7		C/CAP (Tantalum)	ECST1AY106R	1	1	1	1	1	1	1	1	1	1			
	C18		C/CAP (Tantalum)	ECSTOJY106R	0	1	0	0	1	1	0	1	0	1			
	C19		Tantalum Condensor	ECST1DY335R	1	0	1	1	0	0	1	0	1	0			
	C37		Chip Condensor	MCH185A221JK	1	1	1	1	1	1	1	1	1	1			
	C41,C42		Chip Condensor	MCH185A160JK	2	2	2	2	2	2	2	2	2	2			
	C54,C55		Chip Condensor	MCH213F105ZP	0	2	0	0	2	2	0	2	0	2			
	C56~61		Chip Condensor	MCH212C154KP	0	6	0	0	6	6	0	6	0	6			
	C56~57		Chip Condensor	MCH212C154KP	2	0	2	2	0	0	2	0	2	0			
	C34		Electrolytic Capacitor	ECEA1AKS1011	1	1	1	1	1	1	1	1	1	1			
	C33		Electrolytic Capacitor	ECEA0JKA1011	1	1	1	1	1	1	1	1	1	1			
	R1		Chip Resistor	MCR03EZHJ153	1	1	1	1	1	1	1	1	1	1			
	R16		Chip Resistor	MCR03EZHG202	1	1	1	1	1	1	1	1	1	1			
	R17		Chip Resistor	MCR03EZHG102	1	1	1	1	1	1	1	1	1	1			
	R18		Chip Resistor	MCR03EZHG822	1	1	1	1	1	1	1	1	1	1			
	R19		Chip Resistor	MCR03EZHG392	1	1	1	1	1	1	1	1	1	1			
	R20		Chip Resistor	MCR03EZHF1053	0	1	0	0	1	1	0	1	0	1			
	R20		Chip Resistor	MCR03EZHF4532	1	0	1	1	0	0	1	0	1	0			
	R21,R32		Chip Resistor	MCR03EZHJ000	0	2	0	0	0	0	0	2	0	2			
	R21,R32, R42,R100, R106, R111, R208		Chip Resistor	MCR03EZHJ000	7	0	0	0	0	0	7	0	7	0			
	R21,R74		Chip Resistor	MCR03EZHJ000	0	0	0	0	2	2	0	0	0	0			
	R21,R74, R42,R100, R106, R111, R208		Chip Resistor	MCR03EZHJ000	0	0	7	7	0	0	0	0	0	0			
	R22		Chip Resistor	MCR03EZHF5622	0	1	0	0	1	1	0	1	0	1			
	R22		Chip Resistor	MCR03EZHF5362	1	0	1	1	0	0	1	0	1	0			
	R23		Chip Resistor	MCR03EZHF1003	1	1	1	1	1	1	1	1	1	1			
	R25		Chip Resistor	MCR03EZHJ182	1	1	1	1	1	1	1	1	1	1			
	R26		Chip Resistor	MCR03EZHJ473	1	1	1	1	1	1	1	1	1	1			
	R27		Chip Resistor	MCR03EZHJ102	1	1	1	1	1	1	1	1	1	1			
	R28		Chip Resistor	MCR03EZHG105	1	1	1	1	1	1	1	1	1	1			
	R31		Chip Resistor	MCR03EZHJ475	1	1	1	1	1	1	1	1	1	1			
	R33		Chip Resistor	MCR03EZHJ105	1	1	1	1	1	1	1	1	1	1			
	R36, R71~73		Chip Resistor	MCR03EZHJ823	4	4	4	4	4	4	4	4	4	4			
	R50		Chip Resistor	MCR03EZHJ184	1	1	1	1	1	1	1	1	1	1			
	R56		Chip Resistor	MCR03EZHJ106	1	1	1	1	1	1	1	1	1	1			
	R102, R103		Chip Resistor	MCR03EZHJ474	2	0	2	2	0	0	2	0	2	0			

Notes: N – New parts
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N	Item	Code No.	Parts Name	Specification	Quantity										M	FOB Japan N.R.Yen Unit Price	R
					AE	AF	EE	FE	EF	FF	IE	IF	JE	JF			
					4450		4650				4950						
	R115, R116		Chip Resistor	MCR03EZHJ301	2	0	2	2	0	0	2	0	2	0			
		COMPONENT															
N	1	6417 2270	Display Plate Z855A	MC300518-1	1	1	1	1	1	1	0	0	0	0	10		C
N	1	6417 2510	Display Plate Z855I	MC300518-2	0	0	0	0	0	0	1	1	1	1	10		C
N	2	6417 2570	LCD Spacer Z855	MC400054-1	1	1	1	1	1	1	1	1	1	1	10		B
N	3	6417 2150	Upper Case Z855A	MC100005-1	1	1	0	0	0	0	0	0	0	0	5		X
N	3	6417 2320	Upper Case Z855E	MC100005-2	0	0	1	1	1	1	0	0	0	0			X
N	3	6417 2430	Upper Case Z855I	MC100005-3	0	0	0	0	0	0	1	1	1	1	5		X
N	4	6417 2200	Knob Z855A	MC200009-1	1	1	0	0	0	0	0	0	0	0	20		B
N	4	6417 2370	Knob Z855E	MC200009-2	0	0	1	1	1	1	0	0	0	0	20		B
N	4	6417 2480	Knob Z855I	MC200009-3	0	0	0	0	0	0	1	1	1	1	20		B
N	5	6417 2230	Key Top CB-Z855A	MC300523-2	1	1	1	1	1	1	1	1	1	1	20		B
N	6	6417 2250	Rubber Key Z855A	MC100009-1	1	1	0	0	0	0	0	0	0	0	1		C
N	6	6417 2380	Rubber Key Z855E	MC100009-2	0	0	1	1	1	1	0	0	0	0	1		C
N	6	6417 2490	Rubber Key Z855I	MC100009-3	0	0	0	0	0	0	1	1	1	1	1		C
N	8	6417 3290	Z855-1 ASS'Y	MC100011*1	0	1	0	0	0	0	0	0	0	0	1		B
N	8	6417 3300	Z855-1 ASS'Y	MC100011*2	0	0	0	0	1	1	0	0	0	0	1		B
N	8	6417 3310	Z855-1 ASS'Y	MC100011*3	0	0	0	0	0	0	0	1	0	1	1		B
N	9	6417 3320	Z855-1E ASS'Y	MC100012*1	1	0	0	0	0	0	0	0	0	0	1		B
N	9	6417 3330	Z855-1E ASS'Y	MC100012*2	0	0	1	1	0	0	0	0	0	0	1		B
N	9	6417 3340	Z855-1E ASS'Y	MC100012*3	0	0	0	0	0	0	1	0	1	0	1		B
	11	6390 0430	Jack Cover V322	A310765-1	1	1	1	1	1	1	1	1	1	1	20		B
	13	6408 9400	Battery Spring A	C413028-2	1	1	1	1	1	1	1	11	1	1	20		C
	14	3122 2380	Buzzer	EFB-S55C41A8	1	1	1	1	1	1	1	1	1	1	10		C
N	15	6417 2160	Lower Case Z855A	MC100006-1	1	1	0	0	0	0	0	0	0	0	5		X
N	15	6417 2330	Lower Case Z855E	MC100006-2	0	0	1	0	1	0	0	0	0	0	5		X
N	15	6417 2400	Lower Case Z855F	MC100006-3	0	0	0	1	0	1	0	0	0	0	5		X
N	15	6417 2440	Lower Case Z855I	MC100006-4	0	0	0	0	0	0	1	1	0	0	5		X
N	15	6417 2520	Lower Case Z855J	MC100006-5	0	0	0	0	0	0	0	0	1	1	5		X
N	16	6417 2190	B Cover B Z855A	MC300501-1	1	1	0	0	0	0	0	0	0	0	20		C
N	16	6417 2360	B Cover B Z855E	MC300501-2	0	0	1	1	1	1	0	0	0	0	20		C
N	16	6417 2470	B Cover B Z855I	MC300501-3	0	0	0	0	0	0	1	1	1	1	20		C
N	17	6417 2300	Label H-Z855A	MC400052-1	1	1	0	0	0	0	0	0	0	0	10		X
N	17	6417 2390	Label H-Z855E	MC400052-2	0	0	1	0	1	0	0	0	0	0	10		X
N	17	6417 2420	Label H-Z855F	MC400052-3	0	0	0	1	0	1	0	0	0	0	10		X
N	17	6417 2500	Label H-Z855I	MC400052-4	0	0	0	0	0	0	1	1	0	0	10		X
N	17	6417 2540	Label H-Z855J	MC400052-5	0	0	0	0	0	0	0	0	1	1	10		X
N	18	6417 2170	Hard Case Z855A	MC100007-1	1	1	0	0	0	0	0	0	0	0	5		X
N	18	6417 2340	Hard Case Z855E	MC100007-2	0	0	1	0	1	0	0	0	0	0	5		X
N	18	6417 2410	Hard Case Z855F	MC100007-3	0	0	0	1	0	1	0	0	0	0	5		X
N	18	6417 2450	Hard Case Z855I	MC100007-4	0	0	0	0	0	0	1	1	0	0	5		X
N	18	6417 2530	Hard Case Z855J	MC100007-5	0	0	0	0	0	0	0	0	1	1	5		X
N	19	6417 2220	Key Top CR-Z855A	MC300523-1	1	1	1	1	1	1	1	1	1	1	20		B
N	20	6417 2240	Key Top CG-Z855A	MC300523-3	1	1	1	1	1	1	1	1	1	1	20		B
N	23	6417 2260	Buttery Spring PM-M Z855A	MC400045-1	1	1	1	1	1	1	1	1	1	1	20		X
	24	6324 1962	Switch Spring G118	A43333-1	1	1	1	1	1	1	1	1	1	1	20		B
N	25	6417 2210	B Switch Z855A	MC200010-1	1	1	0	0	0	0	0	0	0	0	20		B
N	25	6417 2590	B Switch Z855E	MC200010-2	0	0	1	1	1	1	0	0	0	0	20		B
N	25	6417 2600	B Switch Z855I	MC200010-3	0	0	0	0	0	0	1	1	1	1	20		B

Notes: N – New parts
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N	Item	Code No.	Parts Name	Specification	Quantity										M	FOB Japan N.R.Yen Unit Price	R
					AE	AF	EE	FE	EF	FF	IE	IF	JE	JF			
					4450		4650				4950						
N	26	6511 4881	Reset Button	A311024-2	1	1	1	1	1	1	1	1	1	1	20		B
N	27	6417 2180	B Cover A Z855A	MC300500-1	1	1	0	0	0	0	0	0	0	0	20		C
N	27	6417 2350	B Cover A Z855E	MC300500-2	0	0	1	1	1	1	0	0	0	0	20		C
N	27	6417 2460	B Cover A Z855I	MC300500-3	0	0	0	0	0	0	1	1	1	1	20		C
	28	6416 5860	Badge Label Z850	C440972-1	1	1	1	1	1	1	1	1	1	1	20		X
	31	6408 9410	Battery Spring B	C311911-2	1	1	1	1	1	1	1	1	1	1	20		C
		LCD ASS'Y															
N	LSI10	6417 3871	OC3015-F1 SUB ASS'Y	C340532*3	1	0	1	1	0	0	1	0	1	0	1		B
N	7	3335 6055	LCD	CD1034-TS	1	0	1	1	0	0	1	0	1	0	1		B
N	30	5610 9170	Heat Seal Z855	MC300502-1	1	0	1	1	0	0	1	0	1	0	1		B

Notes: N – New parts
M – Minimum order/supply quantity
Q – Quantity used per unit
R – Rank

R – A : Essential
B : Stock recommended
C : Others
X : No stock recommended

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